LISTING OF CLAIMS:

Claims 1 to 20. (Canceled).

21. (Previously Presented) A method for operating an afterburner device for the afterburner device having a nozzle for metering in at least one of fuel, residual gases, and air, into a combustion chamber that is filled at least in part with foamed ceramics, and having a discharge opening for discharging combustion gases, the method comprising:

recording a speed of combustion in at least one of the combustion chamber and the foamed ceramics;

recirculating at least a part of the combustion gases to a heat exchange channel that is thermally coupled to at least one of the combustion chamber and the foamed ceramics; and

regulating a quantity of the recirculated combustion gases as a function of the recorded speed of combustion.

22. (Previously Presented) The method as recited in claim 21, wherein the recording step includes measuring a temperature.

23. (Previously Presented) The method as recited in claim 22, wherein the temperature is measured via an infrared light measurement.

24. (Previously Presented) The method as recited in claim 21, wherein the quantity of the recirculated combustion gases is regulated based on the speed of combustion in the at least one of the combustion chamber and the foamed ceramics.

25. (Previously Presented) The method as recited in claim 21, further comprising:

regulating a supply of the at least one of the fuel, residual gas, and air, as a function of the recorded speed of combustion.

26. (Previously Presented) The method as recited in claim 25, wherein at too high a temperature or too great a speed of combustion, a supply of air is increased.

27. (Previously Presented) The method as recited in claim 21, further comprising:

electrically heating at least one of the combustion chamber and the foamed ceramics.

Claims 28 to 43. (Canceled).

44. (Previously Presented) The method as recited in claim 21, further comprising:

regulating a proportion of the recirculated combustion gases by changing a quantity of the recirculated combustion gases.